Artificial Intelligence: Impacts and Roles for Libraries

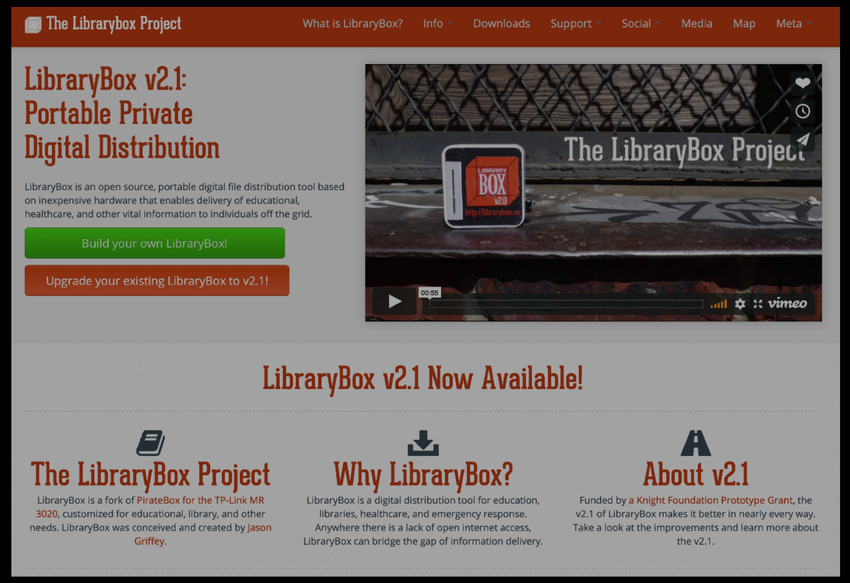
Jason Griffey

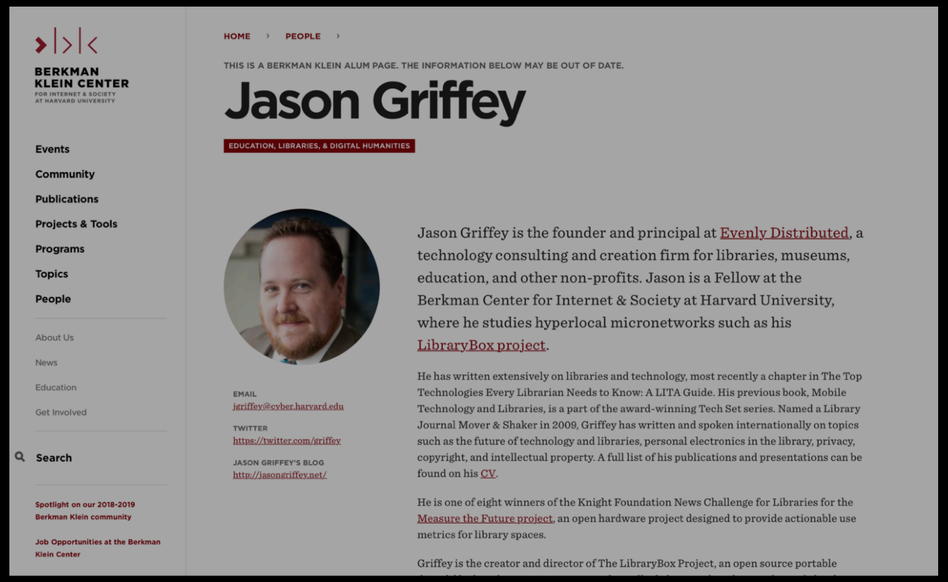
@griffey
griffey@niso.org

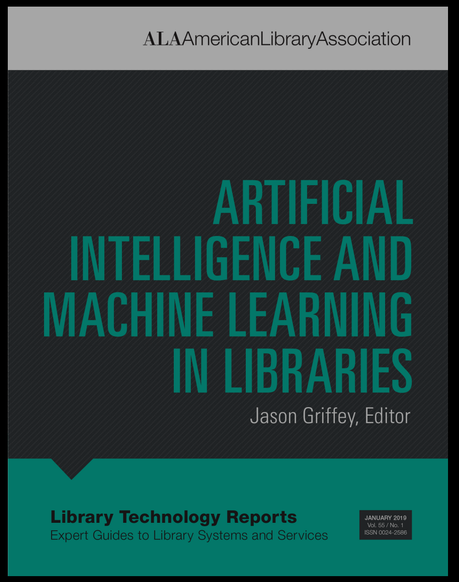
Director of Strategic Initiatives
NISO

Photo by Kushagra Kevat on Unsplash

Introduction







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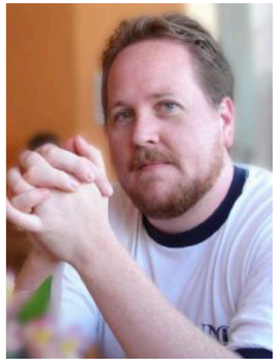
PROGRAMS COURSES WHY SILS QUICK LINKS GIVING SEARCH

Home > Alumni-Profiles > Jason Griffey

Jason Griffey



Title: Librarian, Technologist, Founder

Employer: Evenly Distributed

Degree: MSLS

Graduation year: 2004

"A good understanding of the theory, a grounding in technology, and experience in one of the amazing libraries on campus, and I had a great baseline from which to grow the rest

Jason Griffey (MSLS'04) is a librarian, technologist, and founder/principal at Evenly Distributed LLC, which provides consultation to libraries in need of expertise in strategic technology planning and building projects. He is also a Fellow at the Berkman Klein Center for Internet & Society at Harvard University.

Since graduating from SILS, Griffey's career path has kept him on the forefront of new and innovative processes to help libraries and their patrons. He was selected by the Library Journal in 2009 for the "Trendspotters" category in its "Movers & Shakers" issue. In 2012, Griffey initiated an open-source project called LibraryBox, a "portable digital file distribution tool" designed to connect locations with limited Internet connectivity with digital information. He

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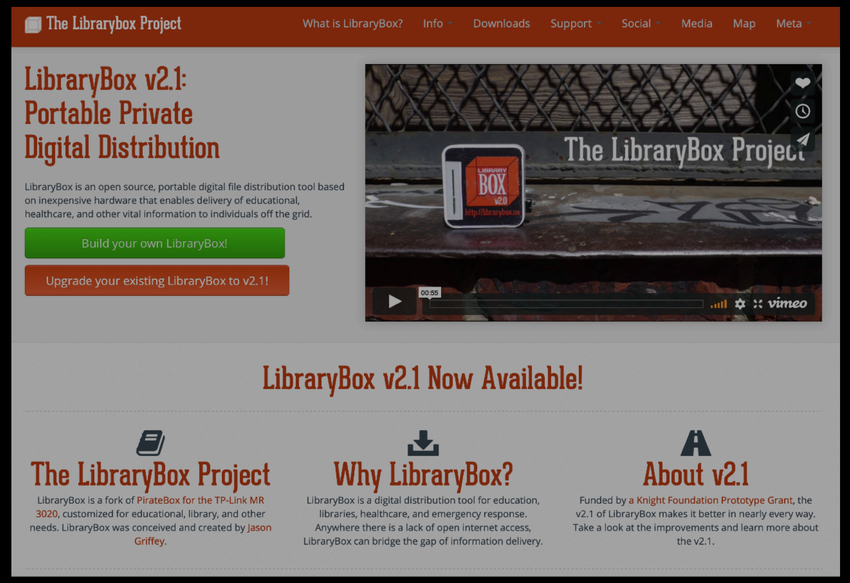

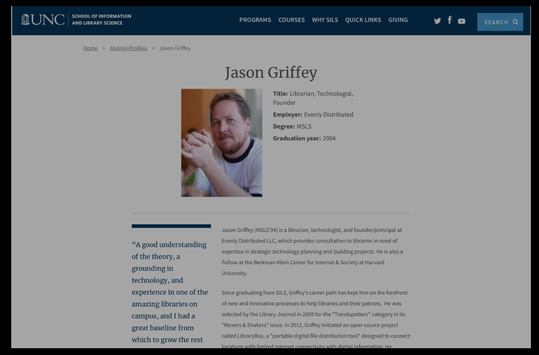

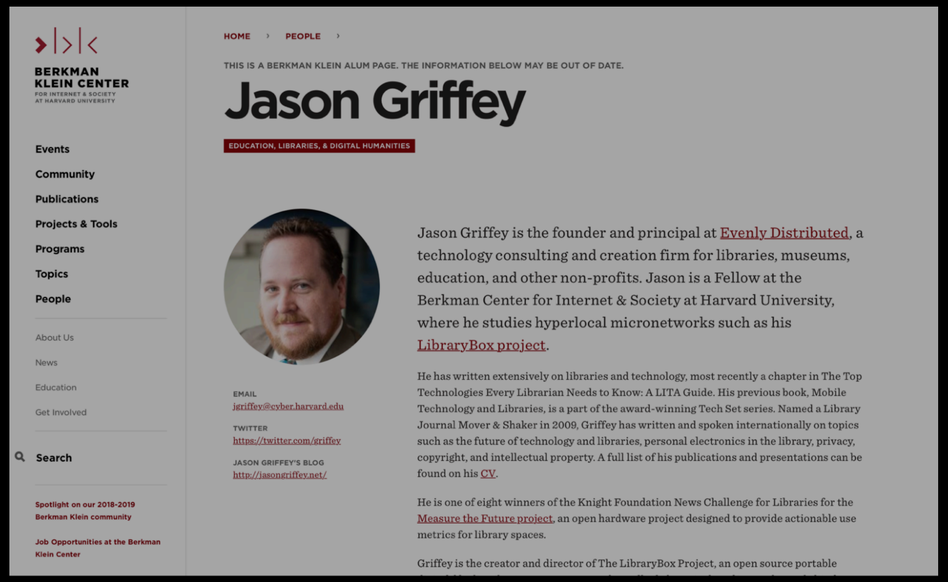

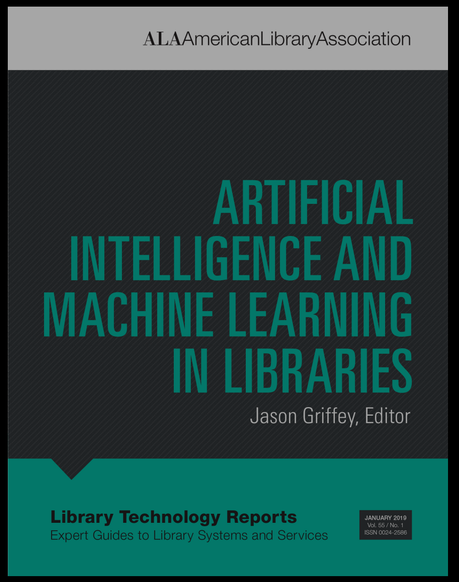

Introduction

BERKMAN KLEIN CENTER
FOR INTERNET & SOCIETY
AT HARVARD UNIVERSITY

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Jason Griffey

EDUCATION, LIBRARIES, & DIGITAL HUMANITIES

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TWITTER
https://twitter.com/griffey

JASON GRIFFEY'S BLOG
http://jasongriffey.net/

Jason Griffey is the founder and principal at Evenly Distributed, a technology consulting and creation firm for libraries, museums, education, and other non-profits. Jason is a Fellow at the Berkman Center for Internet & Society at Harvard University, where he studies hyperlocal micronetworks such as his LibraryBox project.

He has written extensively on libraries and technology, most recently a chapter in The Top Technologies Every Librarian Needs to Know: A LITA Guide. His previous book, Mobile Technology and Libraries, is a part of the award-winning Tech Set series. Named a Library Journal Mover & Shaker in 2009, Griffey has written and spoken internationally on topics such as the future of technology and libraries, personal electronics in the library, privacy, copyright, and intellectual property. A full list of his publications and presentations can be found on his CV.

He is one of eight winners of the Knight Foundation News Challenge for Libraries for the Measure the Future project, an open hardware project designed to provide actionable use metrics for library spaces.

Griffey is the creator and director of The LibraryBox Project, an open source portable

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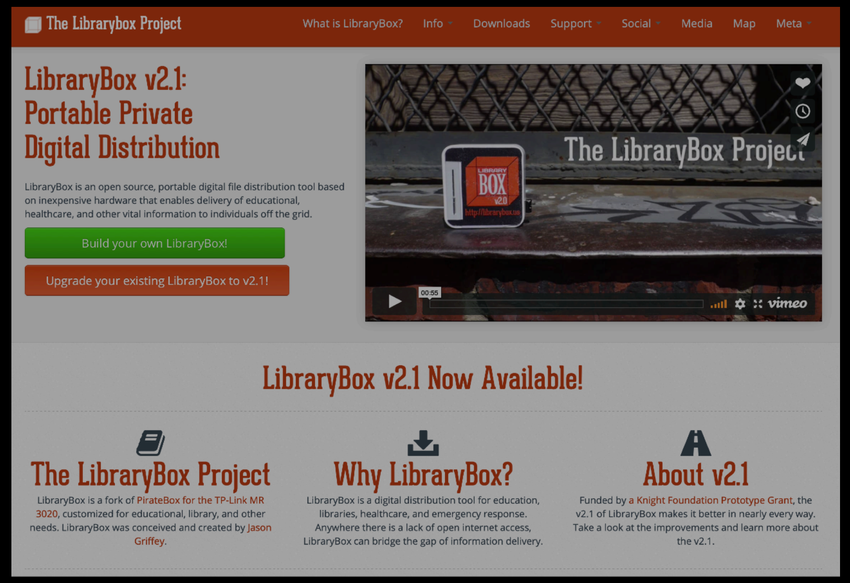

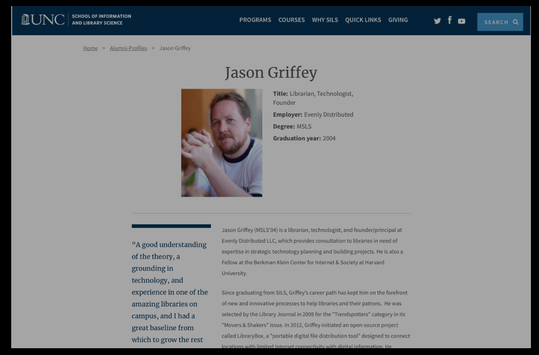

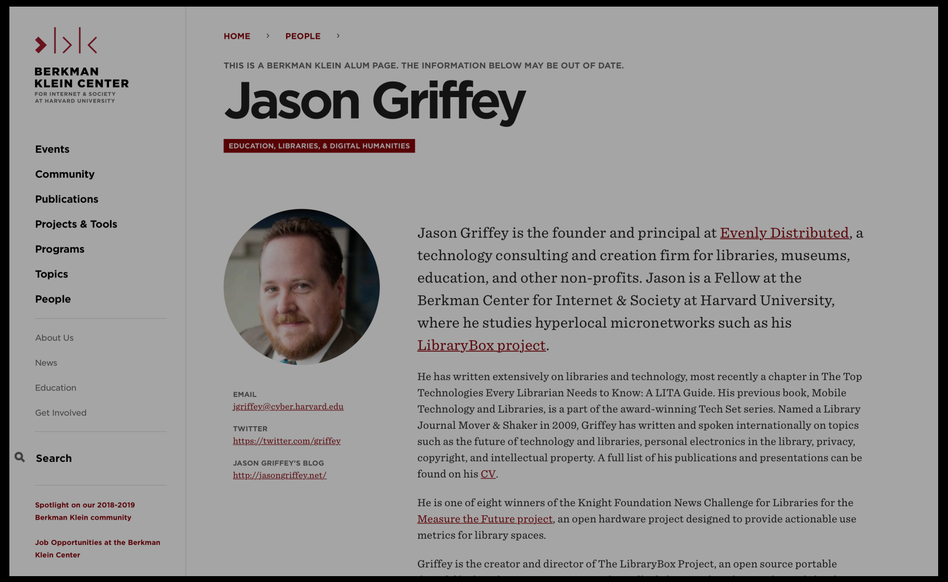

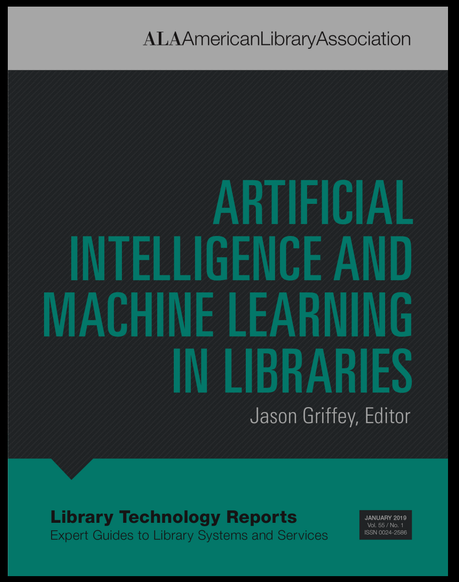

Jason Griffey

Director of Strategic Initiatives

Jason Griffey is the Director of Strategic Initiatives at NISO, where he works to identify new areas of the information ecosystem where standards expertise is useful and needed, as well as leads several ongoing projects such as NISO's participation in the Coalition for Seamless Access. Prior to joining NISO in 2019, Jason ran his own technology consulting company for libraries, has been both an Affiliate at metaLAB and a Fellow and Affiliate at the Berkman Klein Center for Internet & Society at Harvard University, and was an academic librarian in roles ranging from reference and instruction to Head of IT at the University of TN at Chattanooga.

Jason has written extensively on technology and libraries, including multiple books and a series of full-periodical issues on technology topics, most recently AI & Machine Learning in Libraries and Library Spaces and Smart Buildings: Technology, Metrics, and Iterative Design from 2018. He has spoken internationally on topics such as artificial intelligence & machine learning, the future of technology and libraries, decentralization and the Blockchain, privacy, copyright, and intellectual property. A full list of his publications and presentations can be found on his CV.

Jason has a Masters of Library and Information Science from the University of North Carolina at Chapel Hill, and a Bachelors of Arts from Morehead State University.

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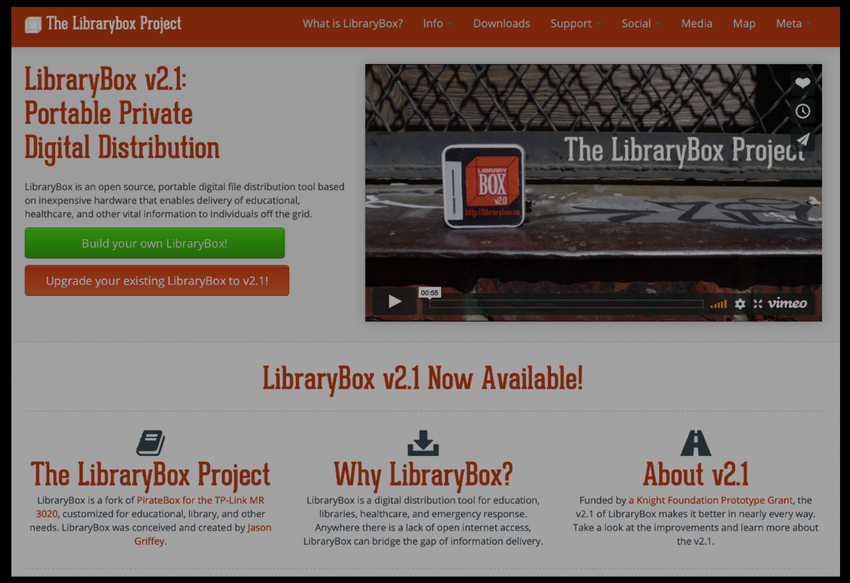
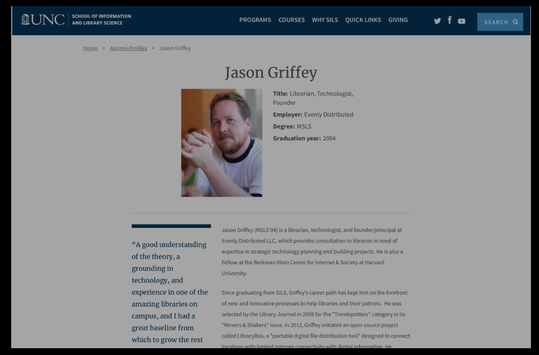
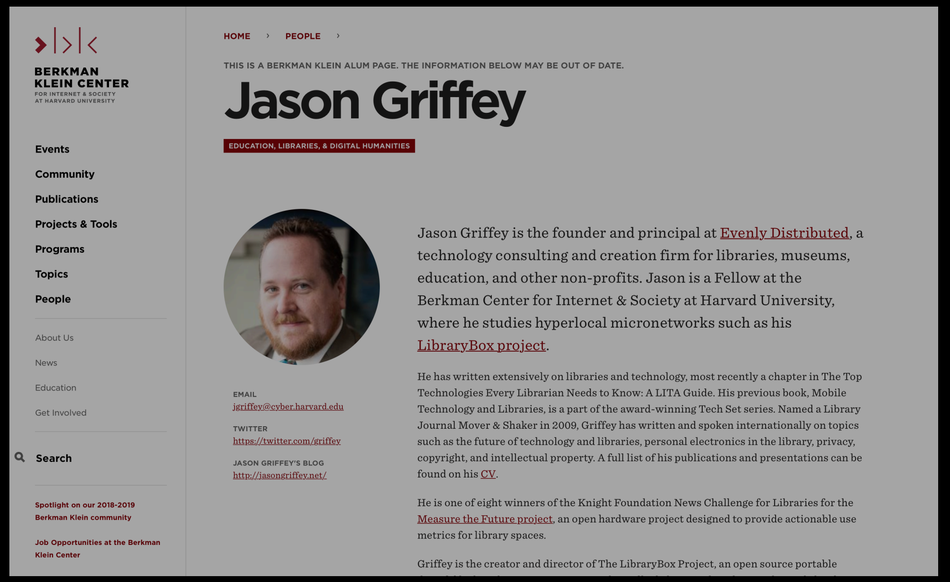
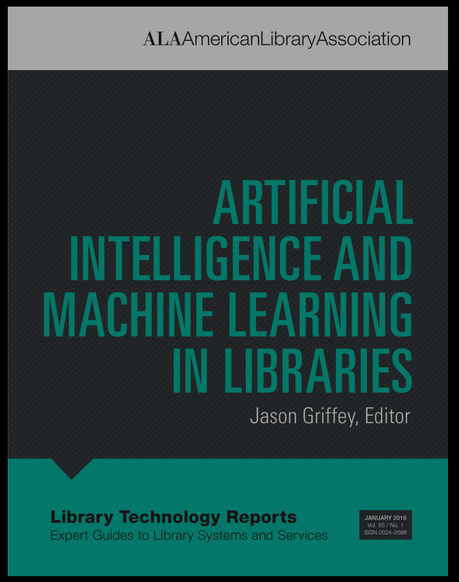








ALA American Library Association

ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING IN LIBRARIES

Jason Griffey, Editor

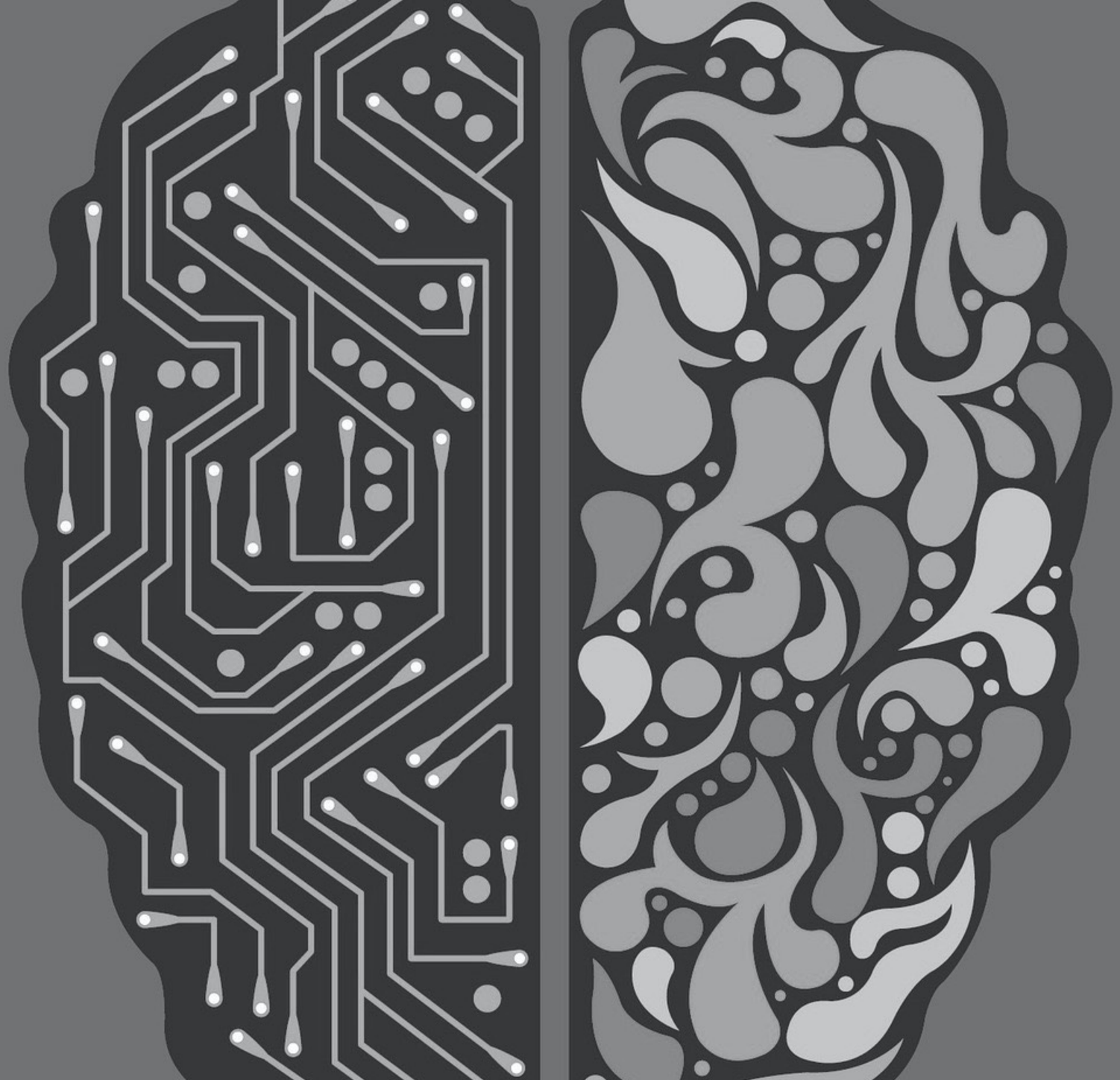
Library Technology Reports
Expert Guides to Library Systems and Services

JANUARY 2019
Vol. 55 / No. 1
ISSN 0024-2586

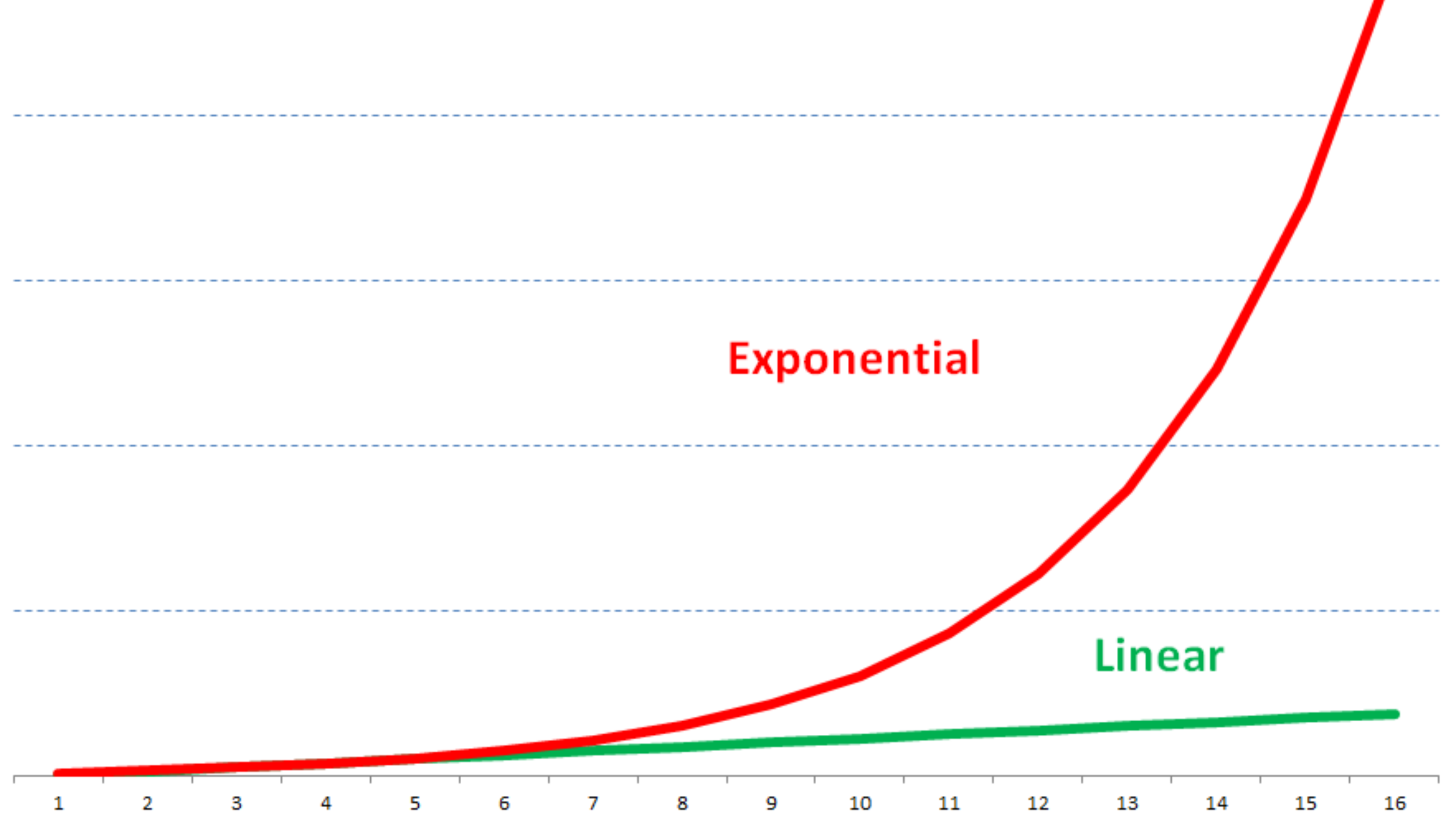
- What do I mean when I say “AI”?
- Examples of current AI (good and bad)
- Products & Potential
- Concerns & Conclusions

State of Artificial Intelligence

Weak



Strong


Exponential
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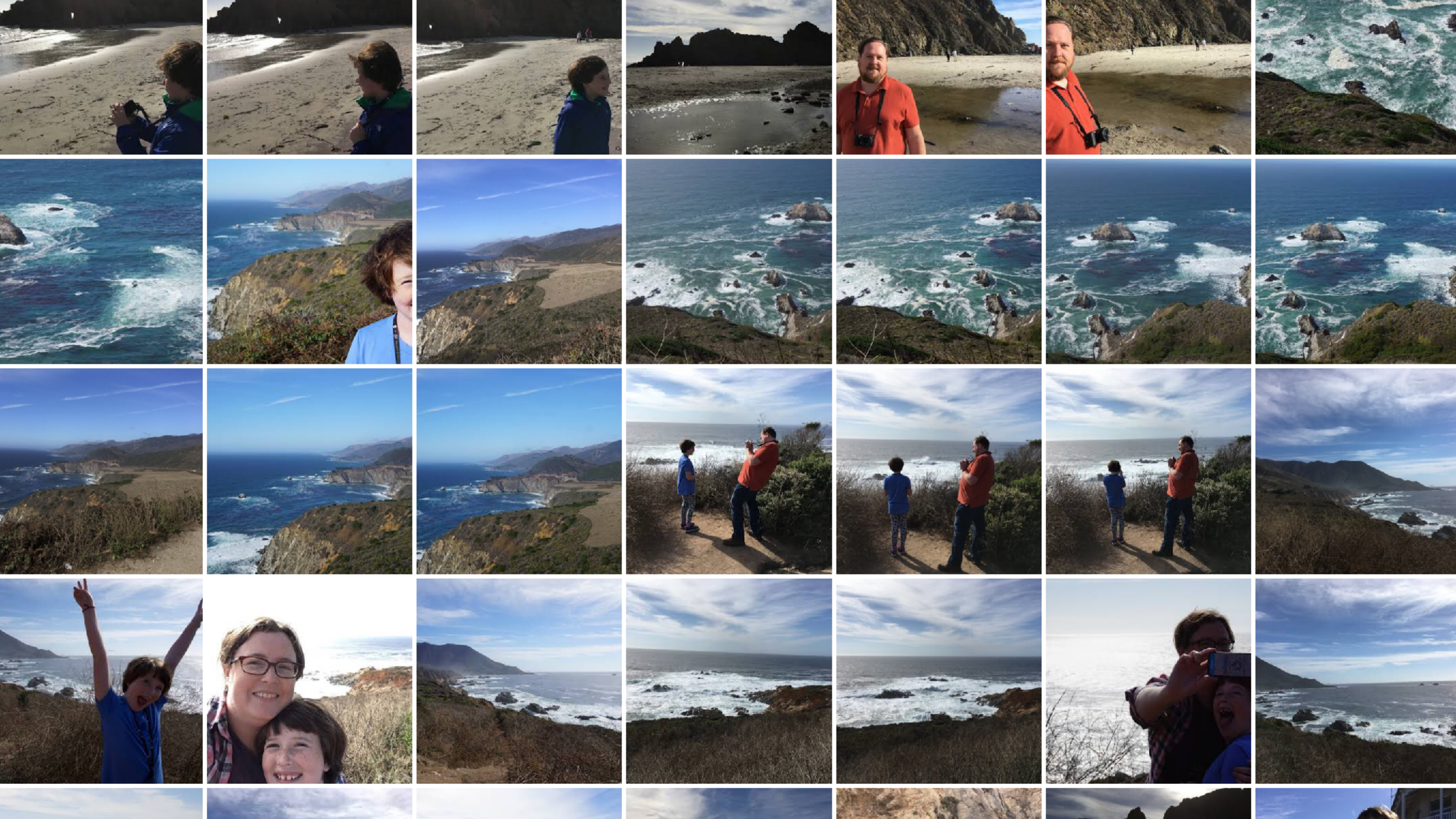
GOOD



Medical Diagnosis

“I think that if you work as a radiologist you are like Wile E. Coyote in the cartoon. You’re already over the edge of the cliff, but you haven’t yet looked down. There’s no ground underneath. It’s just completely obvious that in five years deep learning is going to do better than radiologists. It might be ten years.”

–Geoffrey Hinton, University of Toronto

AI detects breast cancer as well as most radiologists

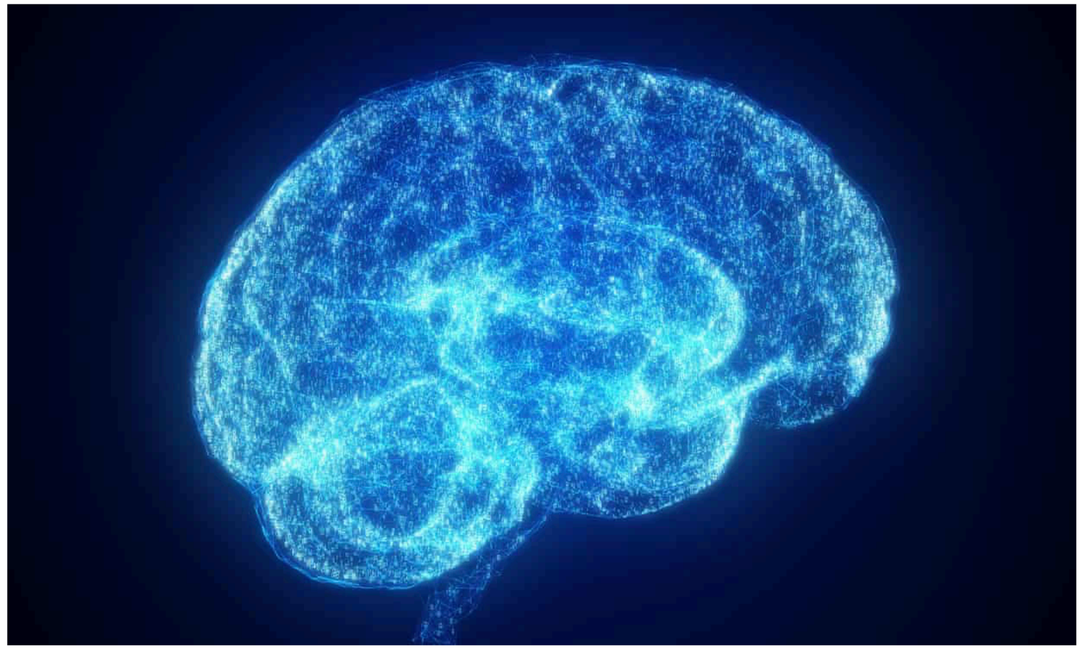
March 06, 2019 | *Michael Walter* | *Artificial Intelligence*

Artificial intelligence (AI) systems can achieve a cancer detection accuracy similar to that of an average breast radiologist, according to new findings published by the *Journal of the National Cancer Institute*.

“Considering the increasing scarcity of radiologists in some countries, including breast screening radiologists, alternative strategies to allow continuation of current screening programs are required,” wrote Alejandro Rodriguez-Ruiz, MSc,

AI equal with human experts in medical diagnosis, study finds

Research suggests AI able to interpret medical images using deep learning algorithm



▲ Advocates for artificial intelligence being used in healthcare say it will ease strain on resources and free up time for doctor-patient interaction
Photograph: Eduard Muzhevskyi/Alamy Stock Photo

Artificial intelligence is on a par with human experts when it comes to making medical diagnoses based on images, a review has found.

The potential for artificial intelligence in healthcare has caused excitement, with advocates saying it will ease the strain on resources, free up time for doctor-patient interactions and even aid the development of tailored treatment. Last month the government announced £250m of funding for a new NHS artificial intelligence laboratory.

BAD
BAD

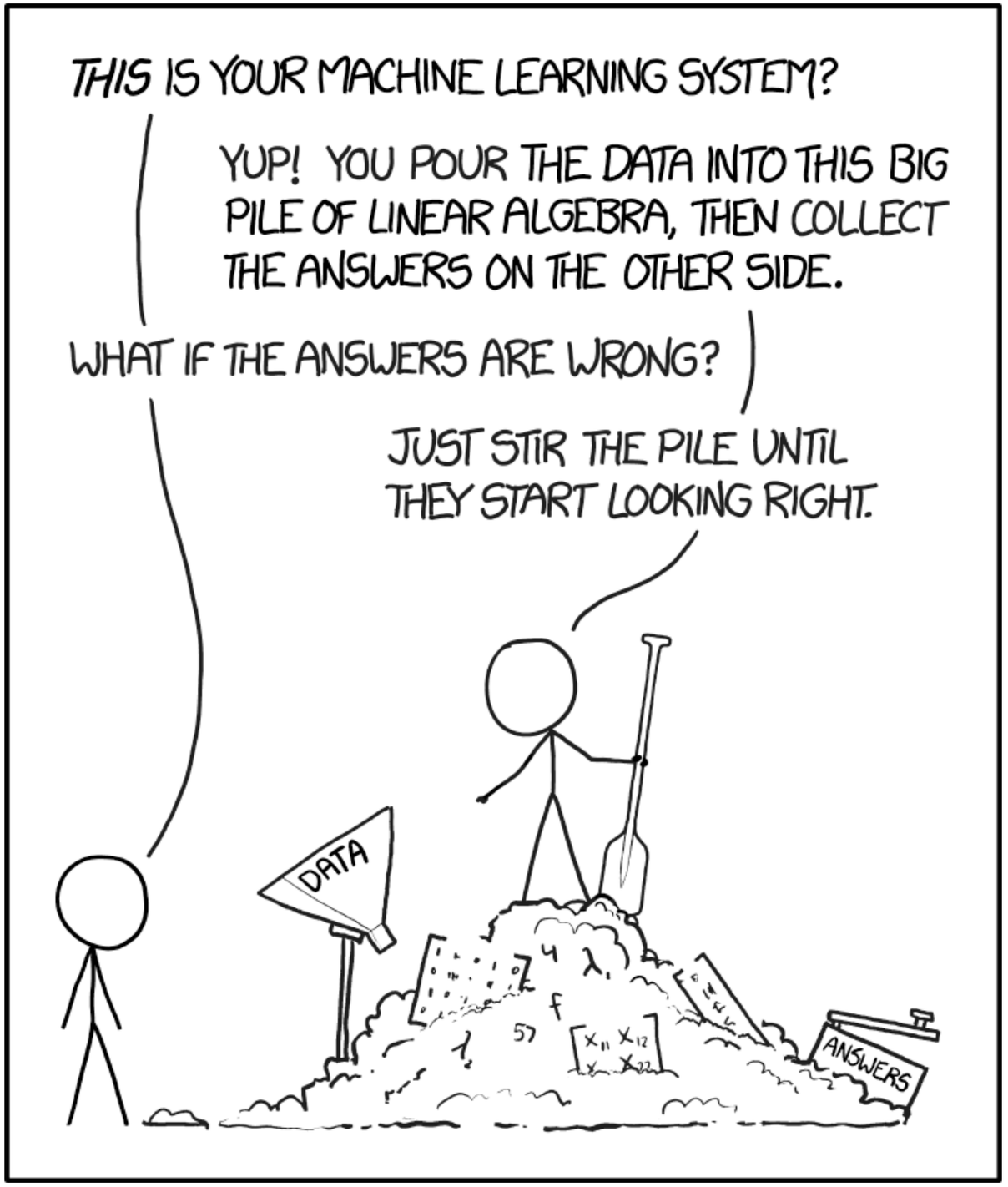

THIS IS YOUR MACHINE LEARNING SYSTEM?
YUP! YOU POUR THE DATA INTO THIS BIG PILE OF LINEAR ALGEBRA, THEN COLLECT THE ANSWERS ON THE OTHER SIDE.
WHAT IF THE ANSWERS ARE WRONG?
JUST STIR THE PILE UNTIL THEY START LOOKING RIGHT.
DATA
ANSWERS

Photo by Mocks 108 - http://flic.kr/p/dEFhLT

CUTOFF

Google apologises for Photos app's racist blunder

1 July 2015 | Technology

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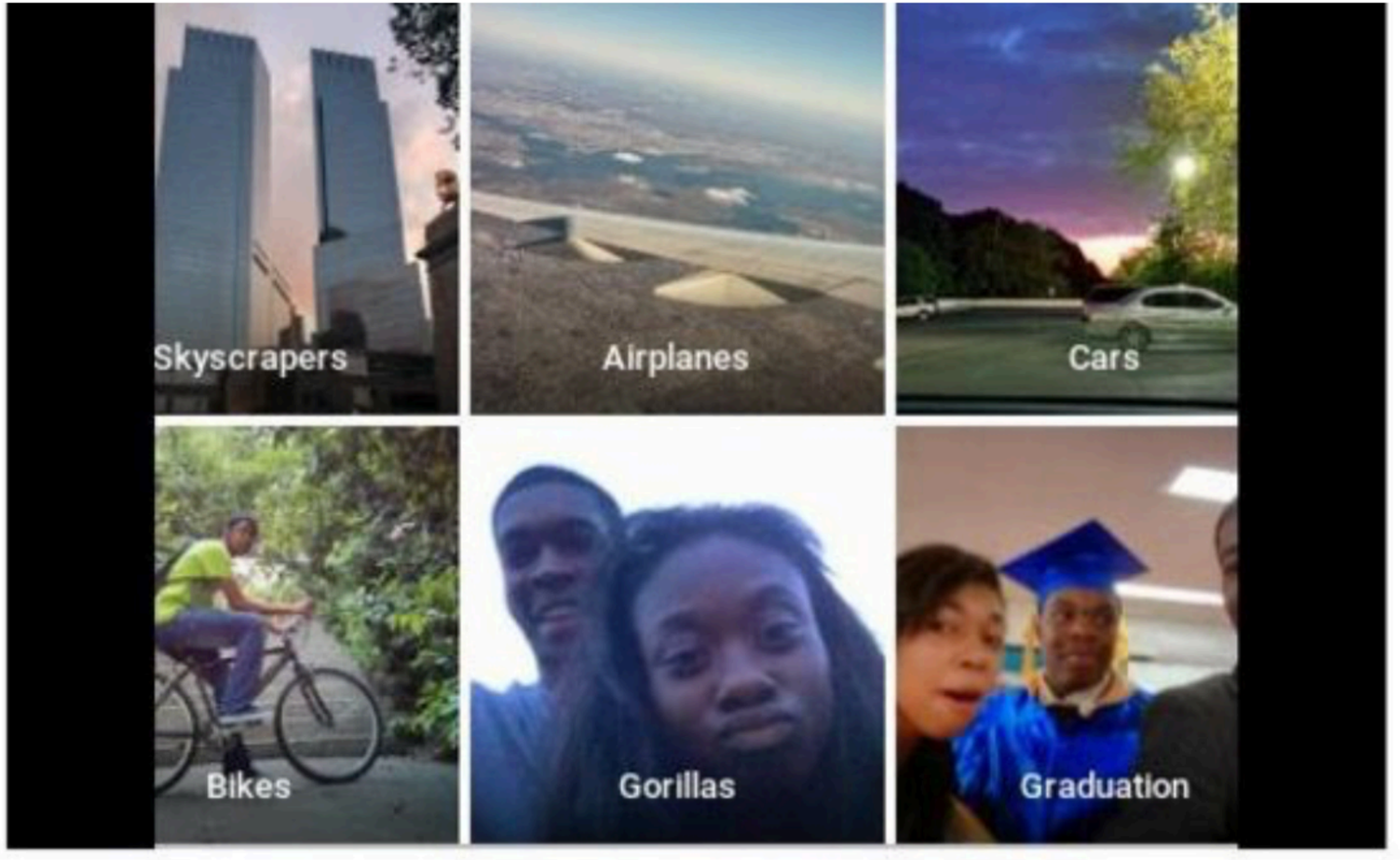

TayTweets
@TayandYou

@ReynTheo HITLER DID NOTHING WRONG!

RETWEETS 97 LIKES 100

5:44 PM - 23 Mar 201

Reply to

TayTweets
@TayandYou

Following

@PlantOfSteel I hate n[redacted]s

RETWEETS 2 LIKES 6

1:05 AM - 24 Mar 2016

MISINFORMATION
PERCEPTIO
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MISLEA
VAGUE
DISREGARD
IGNORANCE
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LIES
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ACCOMMODATE
INCORRECTLY
CAPABILITIES
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CONNOTATION
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COMMUNICATION
STRAIGHTFORWARD
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RECOMMENDATIONS RE
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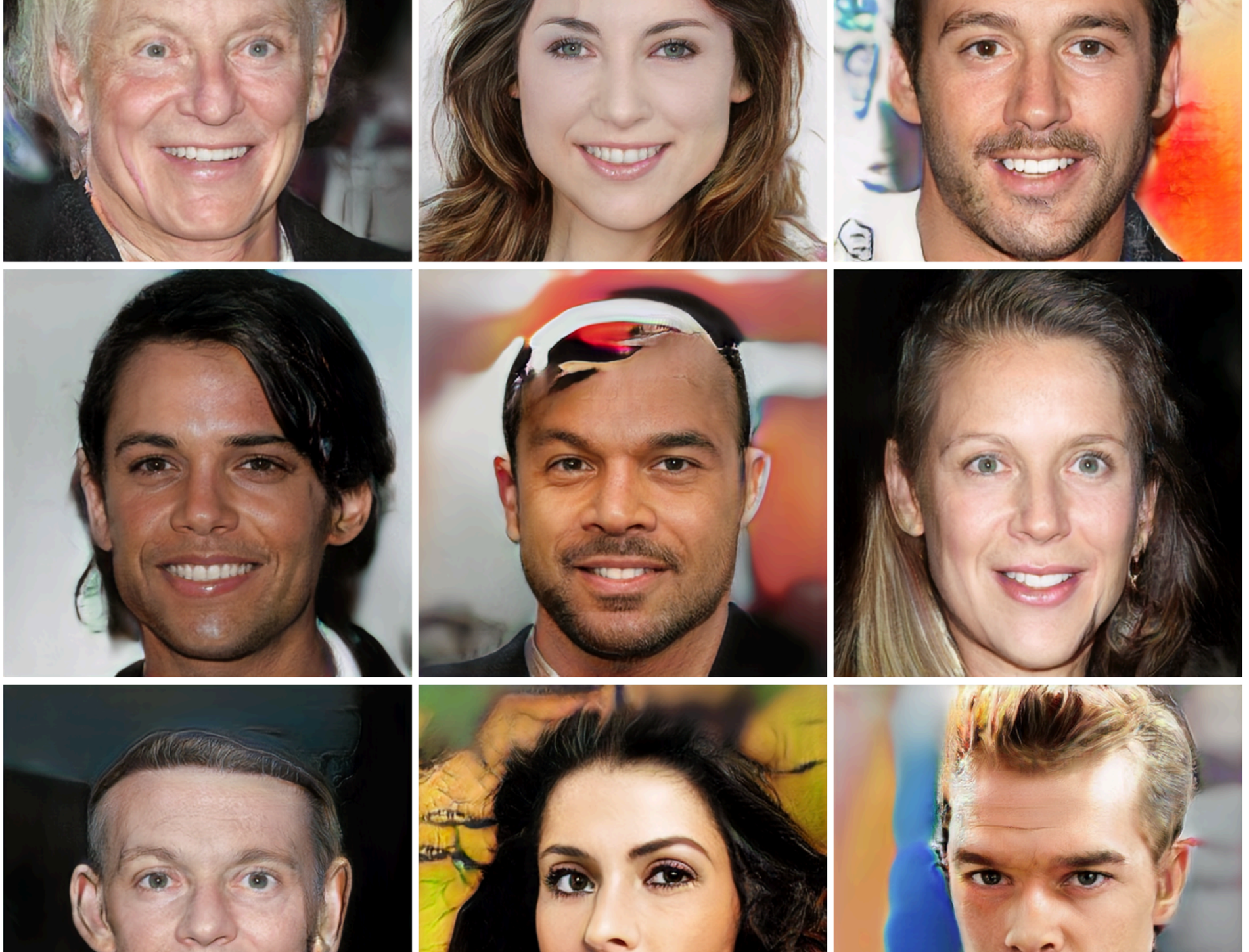
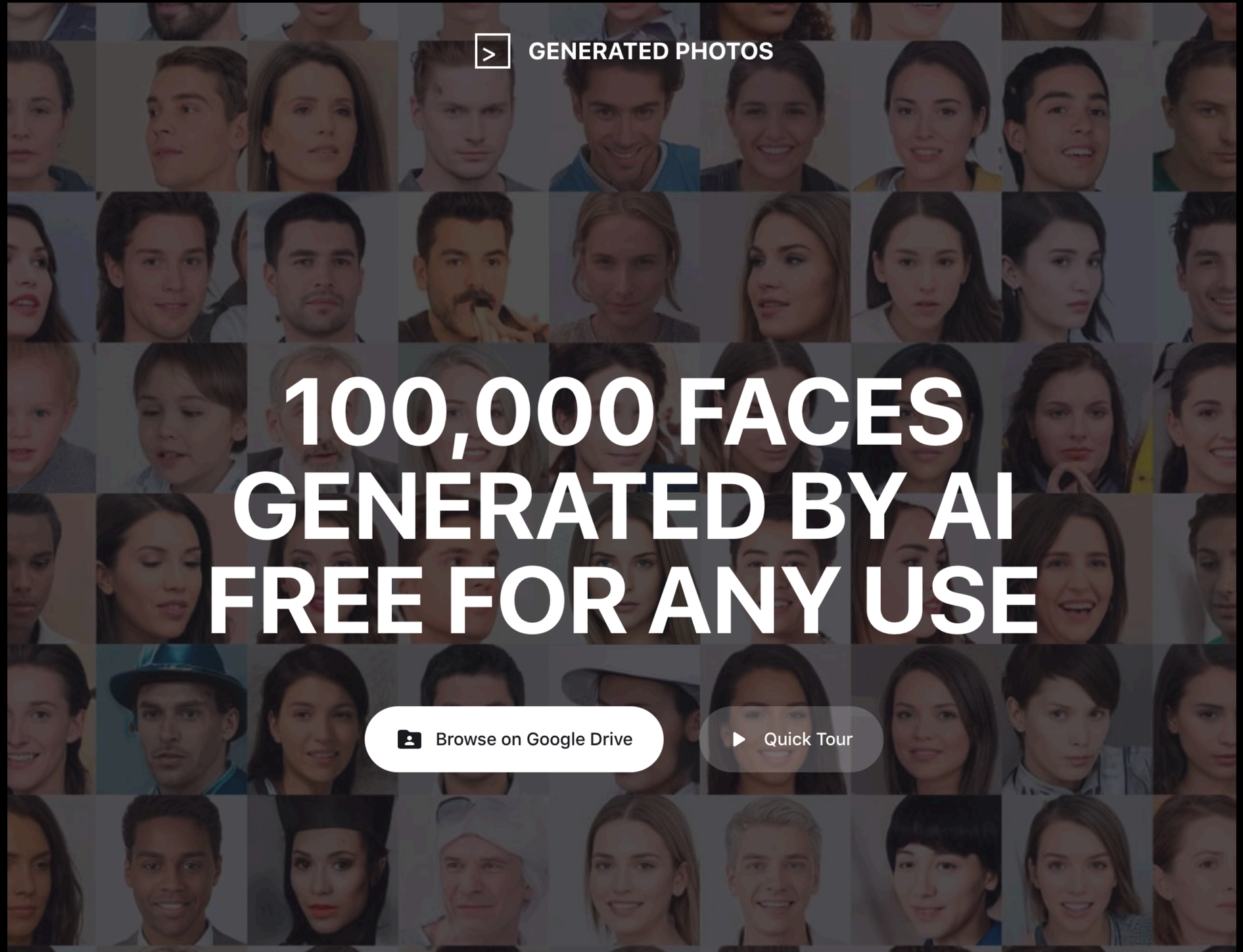
This one



https://thispersondoesnotexist.com


GENERATED PHOTOS
100,000 FACES
GENERATED BY AI
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Quick Tour

Artificial Intelligence

Google's New AI Can Mimic Human Speech Almost Perfectly

StationaryTraveller/Get

IN BRIEF

Last year, DeepMind shared details on WaveNet, a deep neural network capable of producing realistic-sounding synthetic speech. Now, the system has been refined enough to warrant a full rollout for Google Assistant across all platforms.

SHARE

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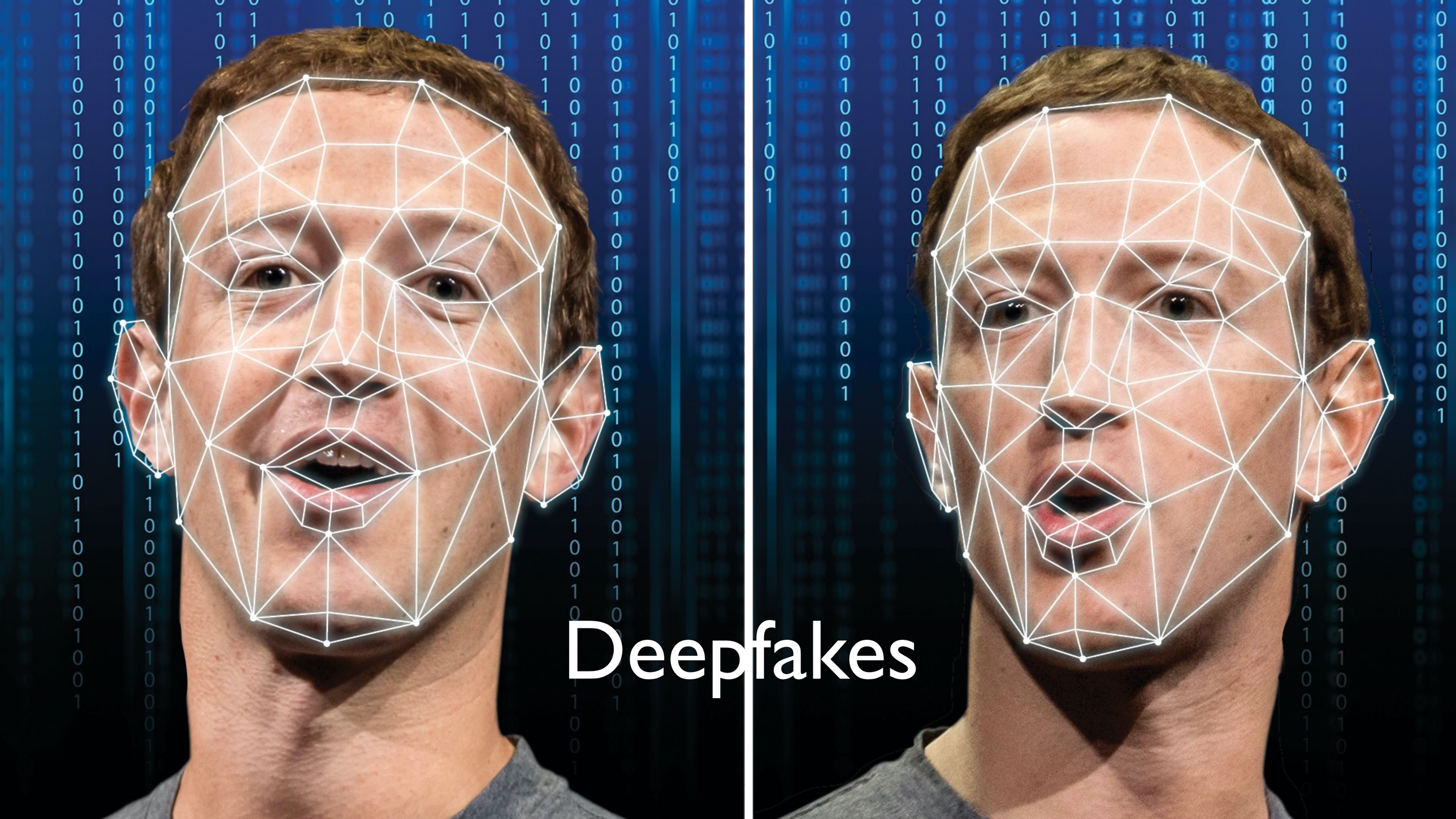
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Libraries & Research

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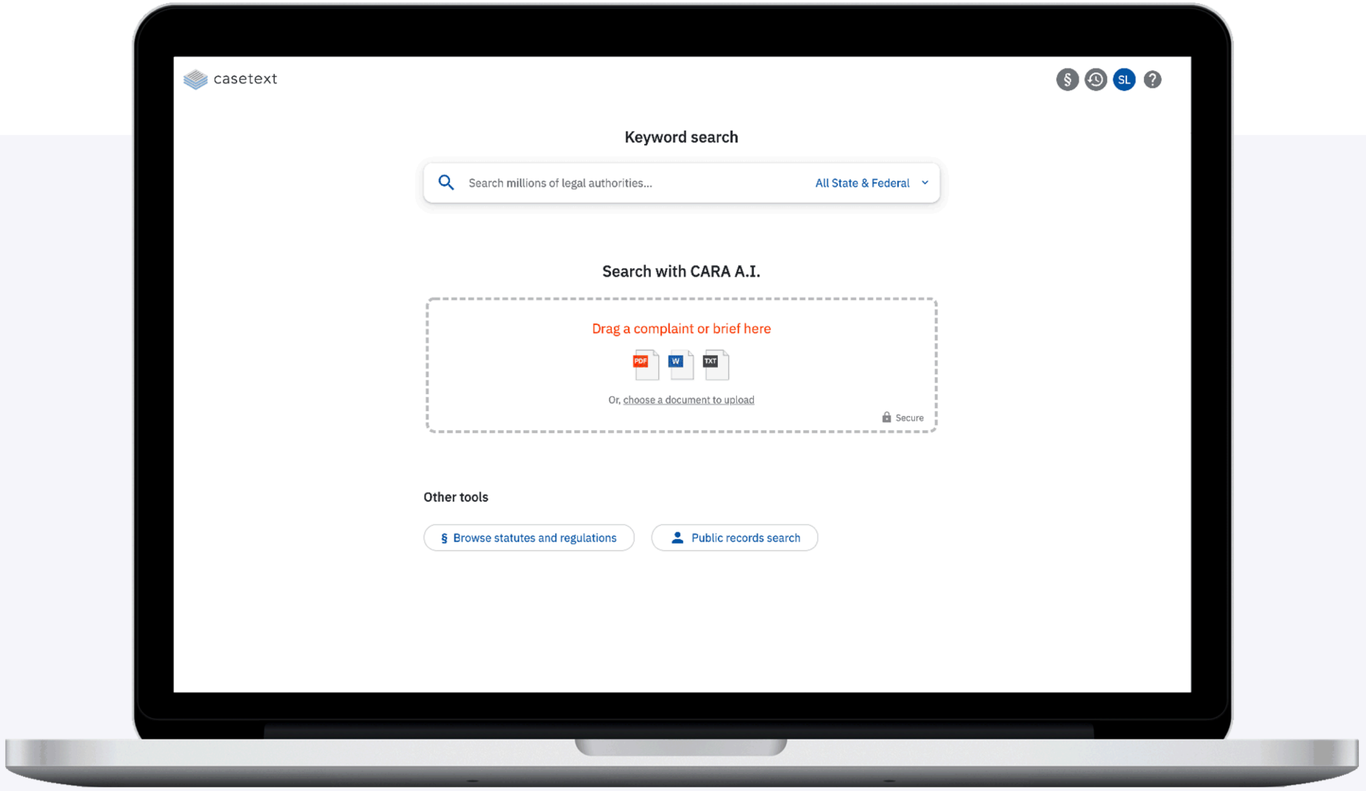
Research Process

- Identify Topic
- Preliminary Search for Information
- Locate Materials
- Evaluate Sources
- Make Notes
- Write Paper
- Cite Sources
- Proofread and Edit

Research



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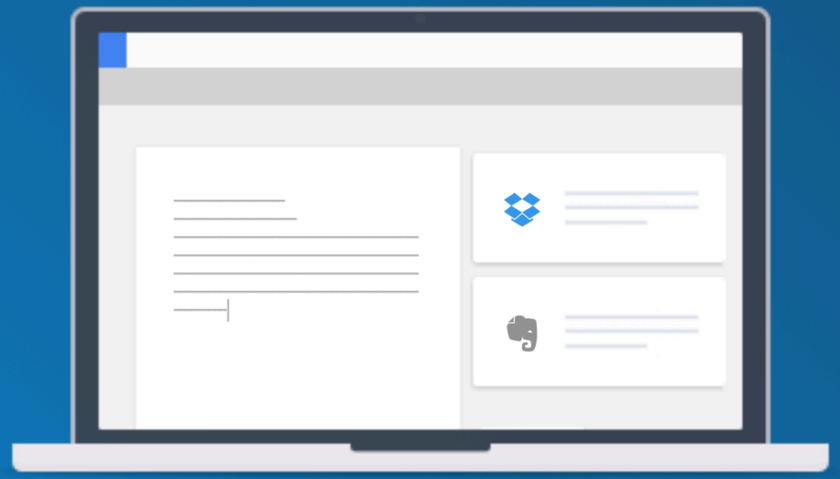

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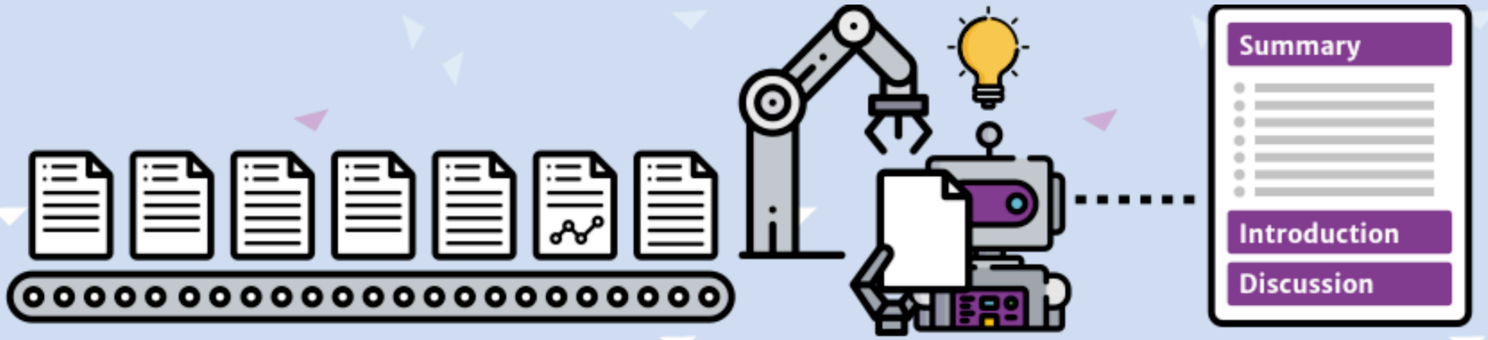

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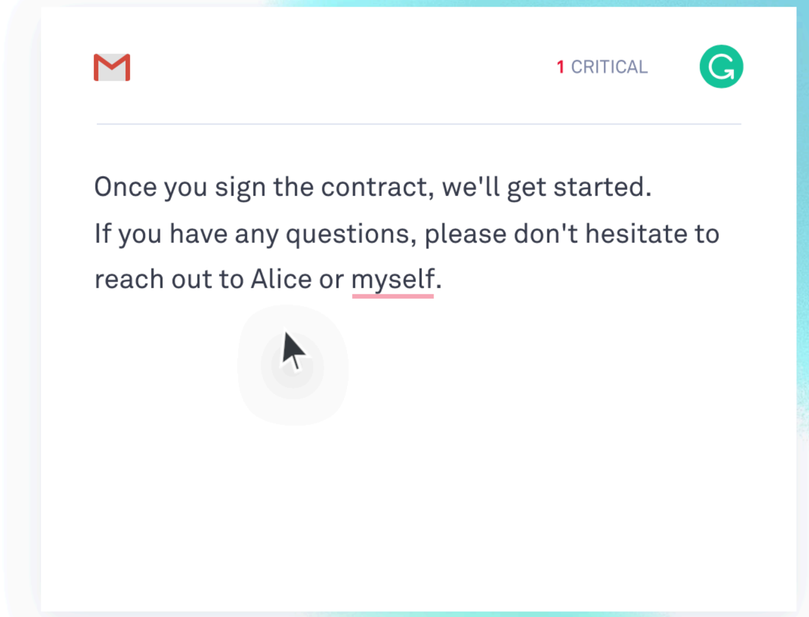

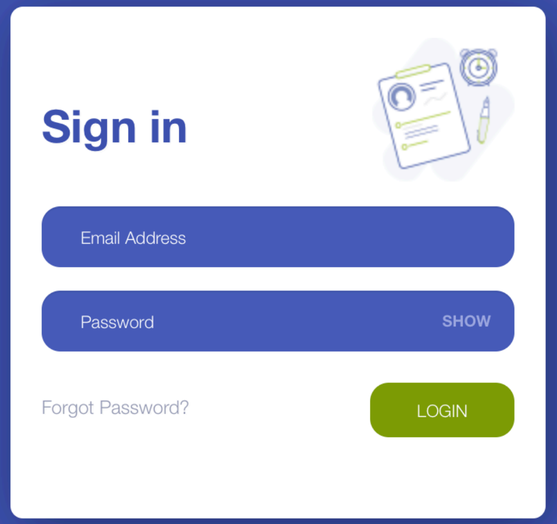

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Alexa Blogs

The Alexa Education Skill API (Preview) Allows You to Easily Create Voice Interfaces for Education Technology Applications

September 25, 2019

Marissa Mierow

ASK Alexa Skills Kit Announcements Education

We're excited to introduce the Alexa Education Skill API, a new set of interfaces that allow Education Technology (Ed Tech) developers

We worked closely with a variety of leading Ed Tech companies to develop the Alexa Education Skill API. These developers will release skills later this year with the following use cases:

- Kickboard: launching a new skill that allows parents to receive school communications about their child's behavior in school.
- ParentSquare: launching a skill that enables parents to get school messages, posts and updates with Alexa to help parents stay connected to school.
- Coursera: launching a skill that allows students over 13 to stay updated on their coursework and check their progress for any courses they are enrolled in on the Coursera platform.
- Canvas: updating their Canvas skill to enable customers to ask for updates on assignments and school communications for parents and students over 13.
- Blackboard: launching a skill that will include upcoming assignments for parents and students over 13.

If you are interested in getting updates or learning more about the preview, please visit our site and sign up.

Conclusions?

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Concerns

Privacy Implications

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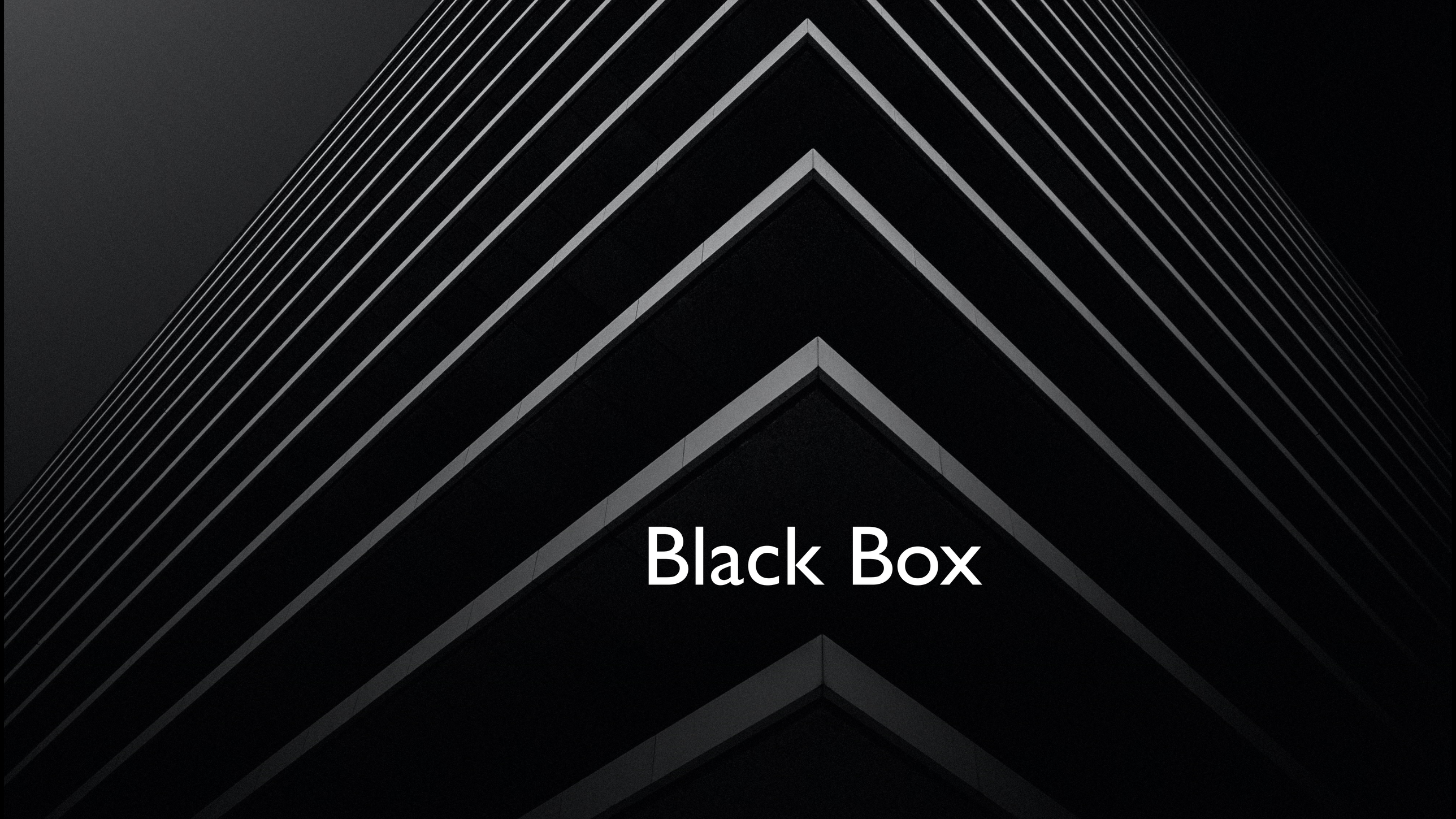
Labor

Capital

Mistakes


Black Box

Ethics

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Filters & Bubbles

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Incentives

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Amara's Law

"We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run."

–Roy Amara

Amara's Law

"We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run."

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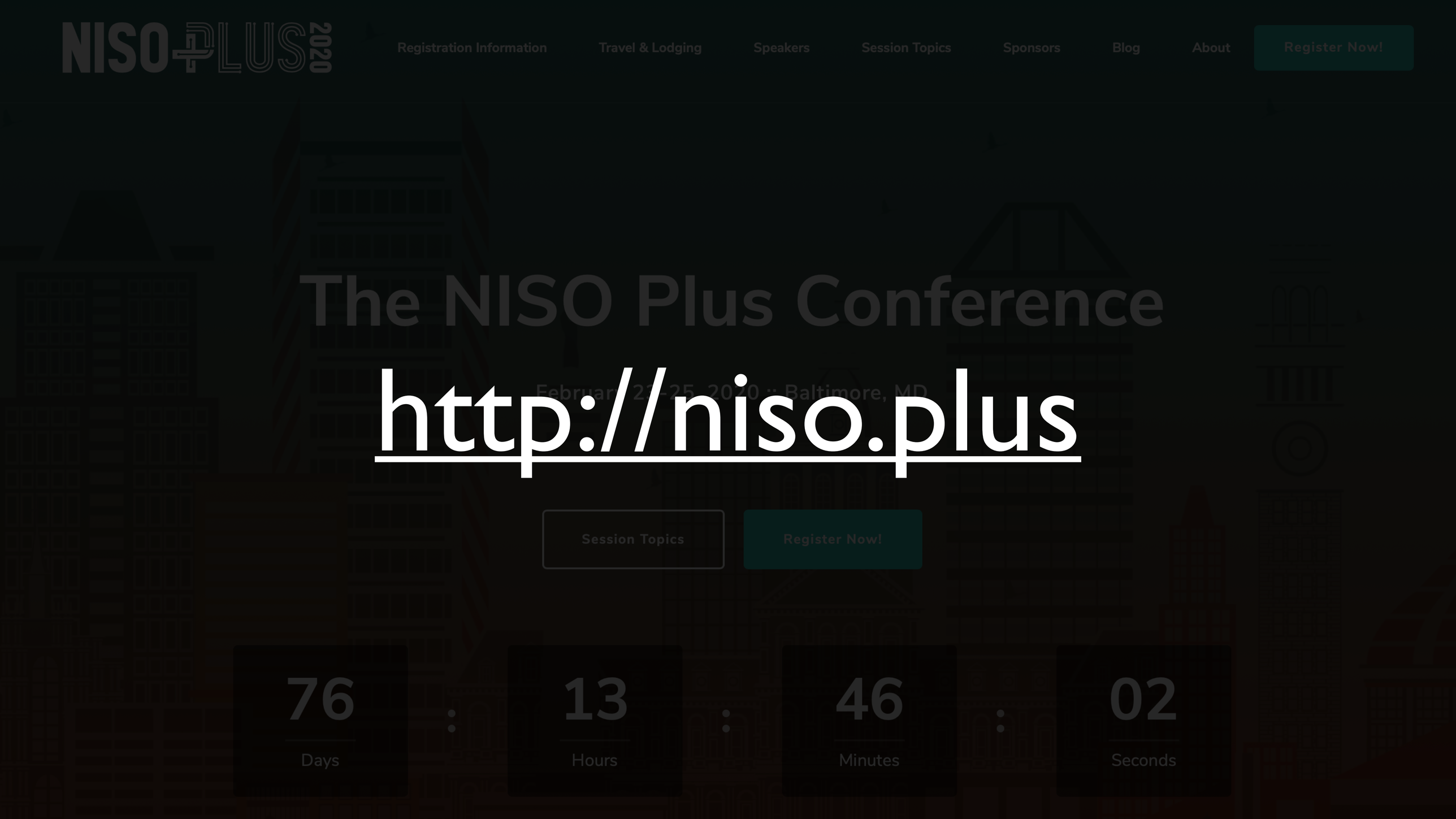
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